

HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO SECTION

Supplemental Alternative
Analysis Report

Presented to:

California High-Speed Rail
Authority Board

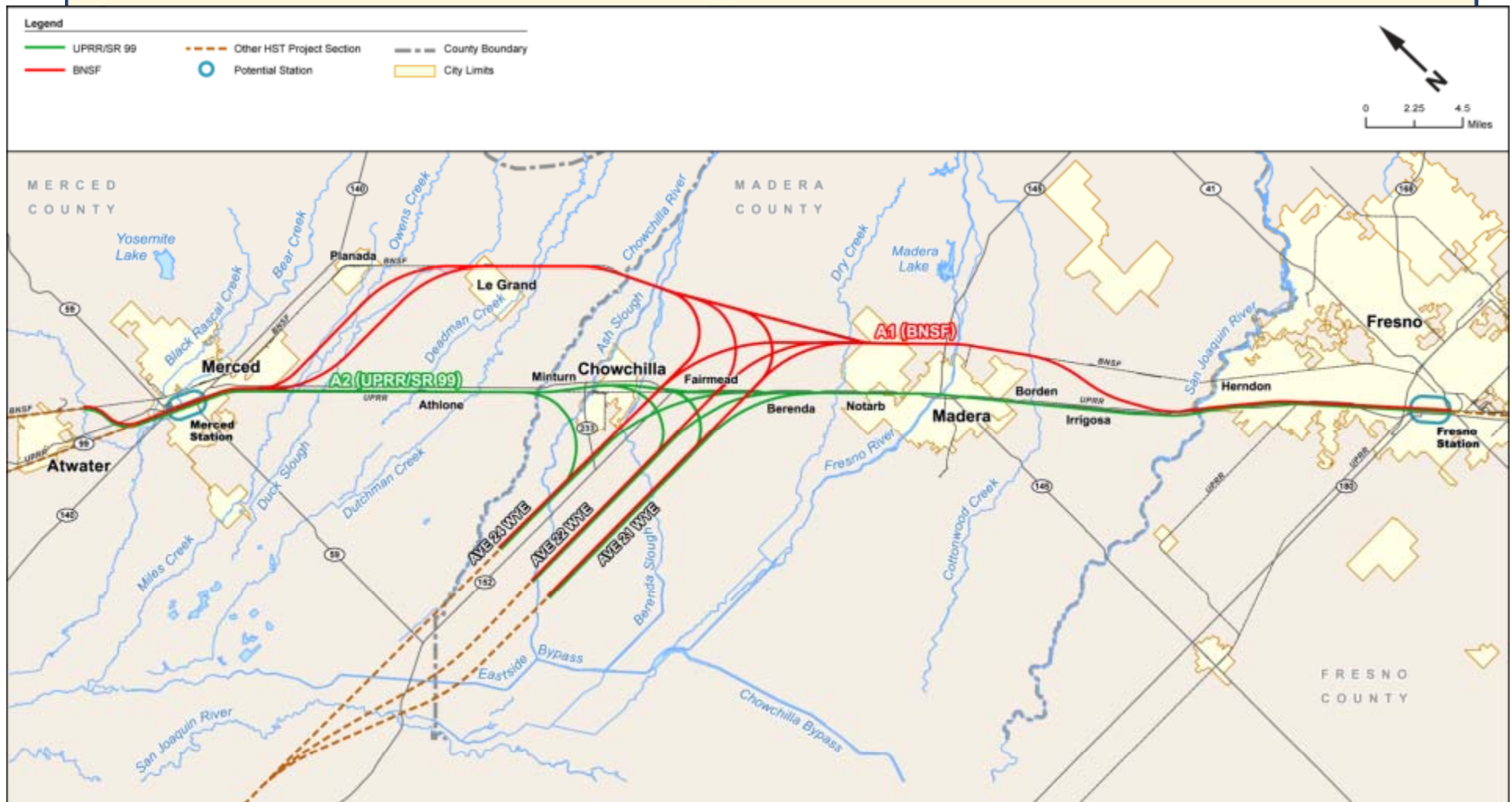
May 5, 2011



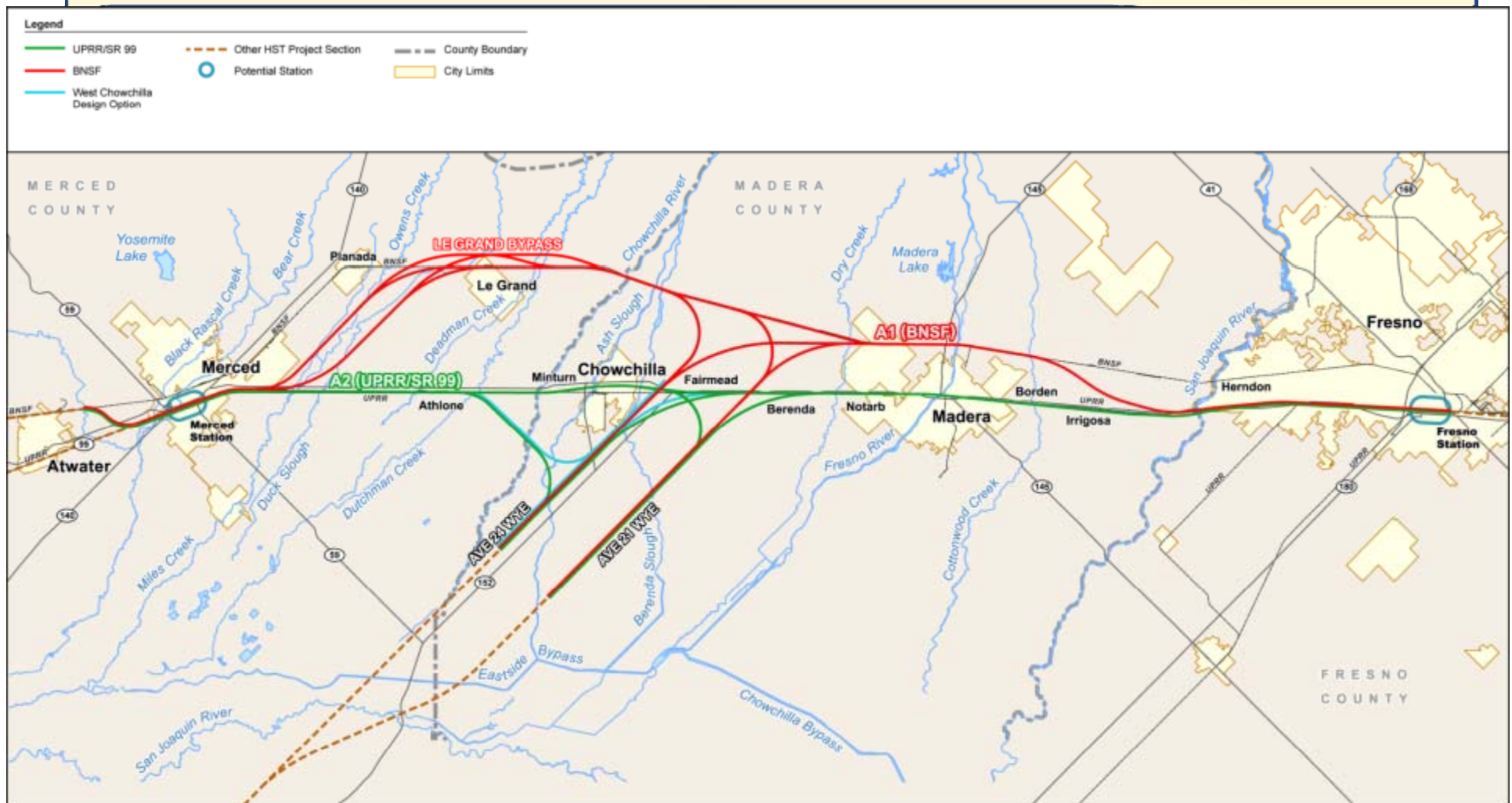
SUPPLEMENTAL AA BRIEFING TO BOARD

- Background
- Status To Date
 - Preliminary AA Alternatives (April 2010)
 - Supplemental AA (August 2010)
- Outreach Effort
- Value Engineering
- Recommendations
- Next Steps

PRELIMINARY ALTERNATIVES PRIOR TO AUGUST 5, 2010 BOARD MEETING



ALTERNATIVES CARRIED FORWARD AFTER AUGUST 5, 2010 BOARD MEETING



OUTREACH PROGRAM

- Since Last Supplemental AA (August 2010):
 - Total of 21 Public & Technical Working Group meetings were held :
 - Transportation/Planning Agency Working Groups,
 - Public Information Meetings, Stakeholder Briefings,
 - Elected Official Briefings, Community Organizations
 - Agricultural, Tribal Consultations, Multiculturals
- Since Project Initiation (November, 2008):
 - 108 meetings

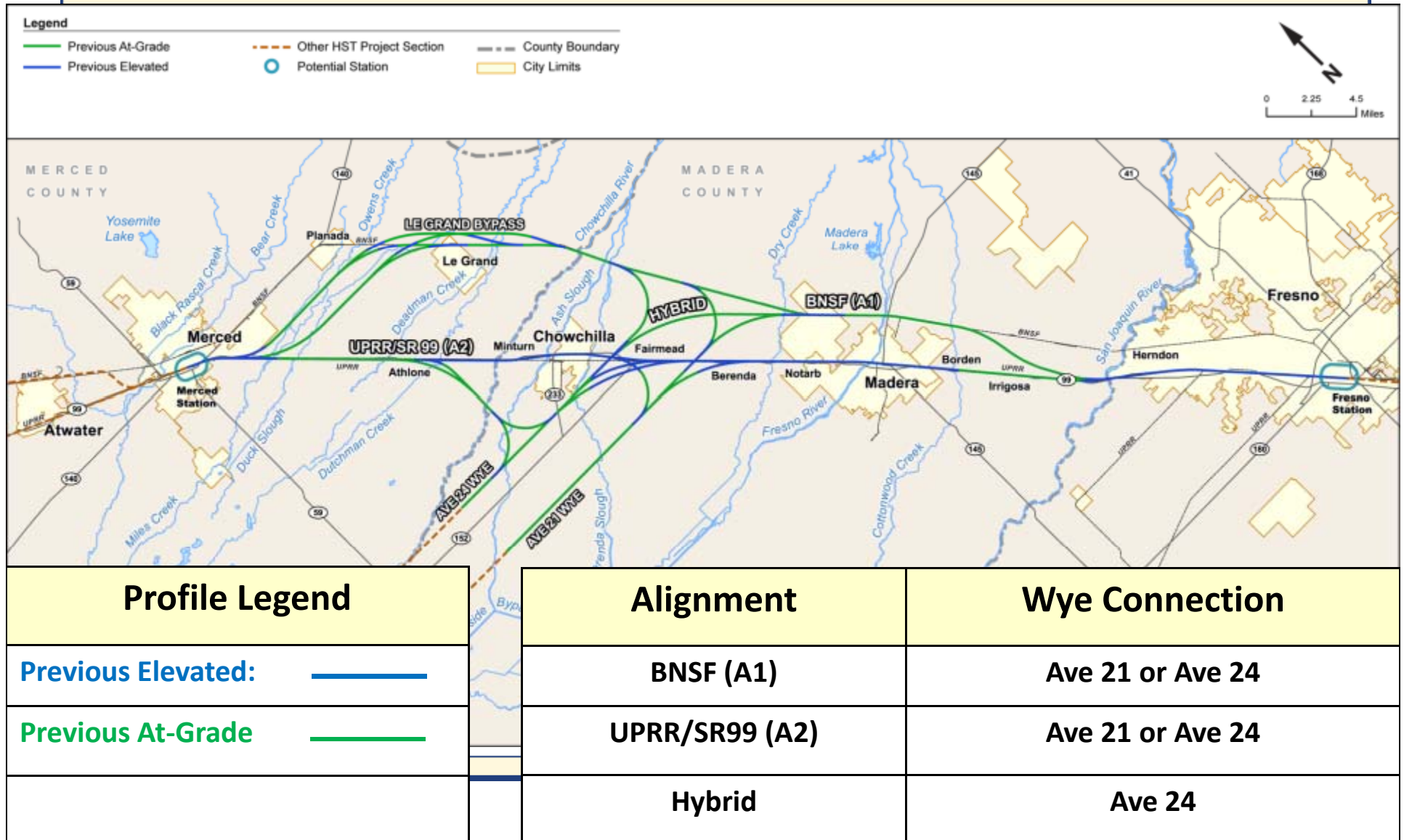
VALUE ENGINEERING CONCEPT

- Continuous review throughout Project
 - Reduced Impacts
 - Increased Efficiency
 - Reduced Life Cycle Cost
 - Other Synergetic Benefits
 - Grade separate freight rail crossings
 - Eliminate train whistle/grade crossing warning bells
 - Improve traffic flow & emergency service access

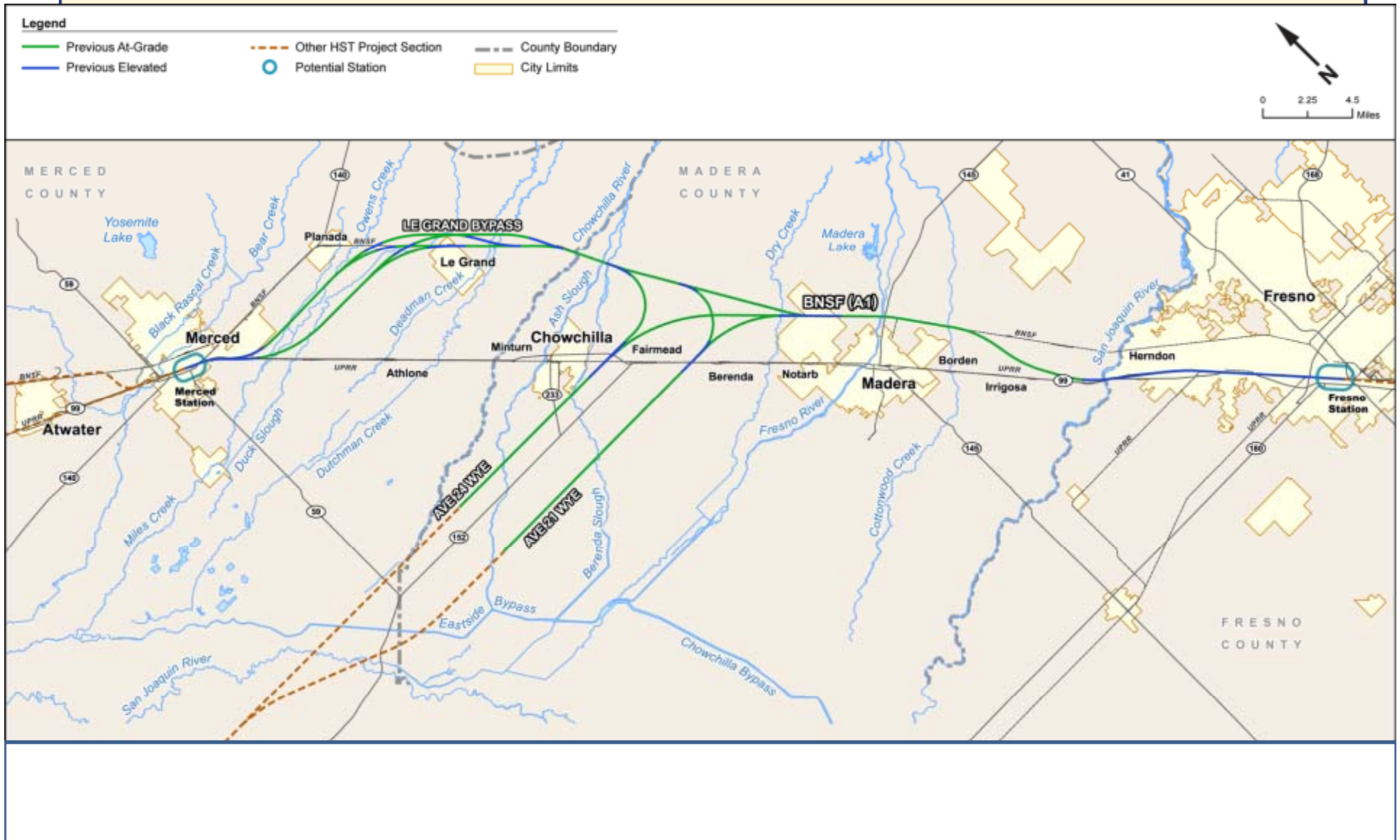
CURRENT VALUE ENGINEERING EFFORT

- Reduced Extent of Elevated Structure:
 - Modified geometry of at-grade/elevated transitions on curves
 - Worked with Merced and Fresno to identify areas with potential at-grade solutions
 - Identified feasible locations
 - Eliminated UPRR at-grade crossings
 - Maintained/enhanced traffic flow
 - Introduced at-grade stations

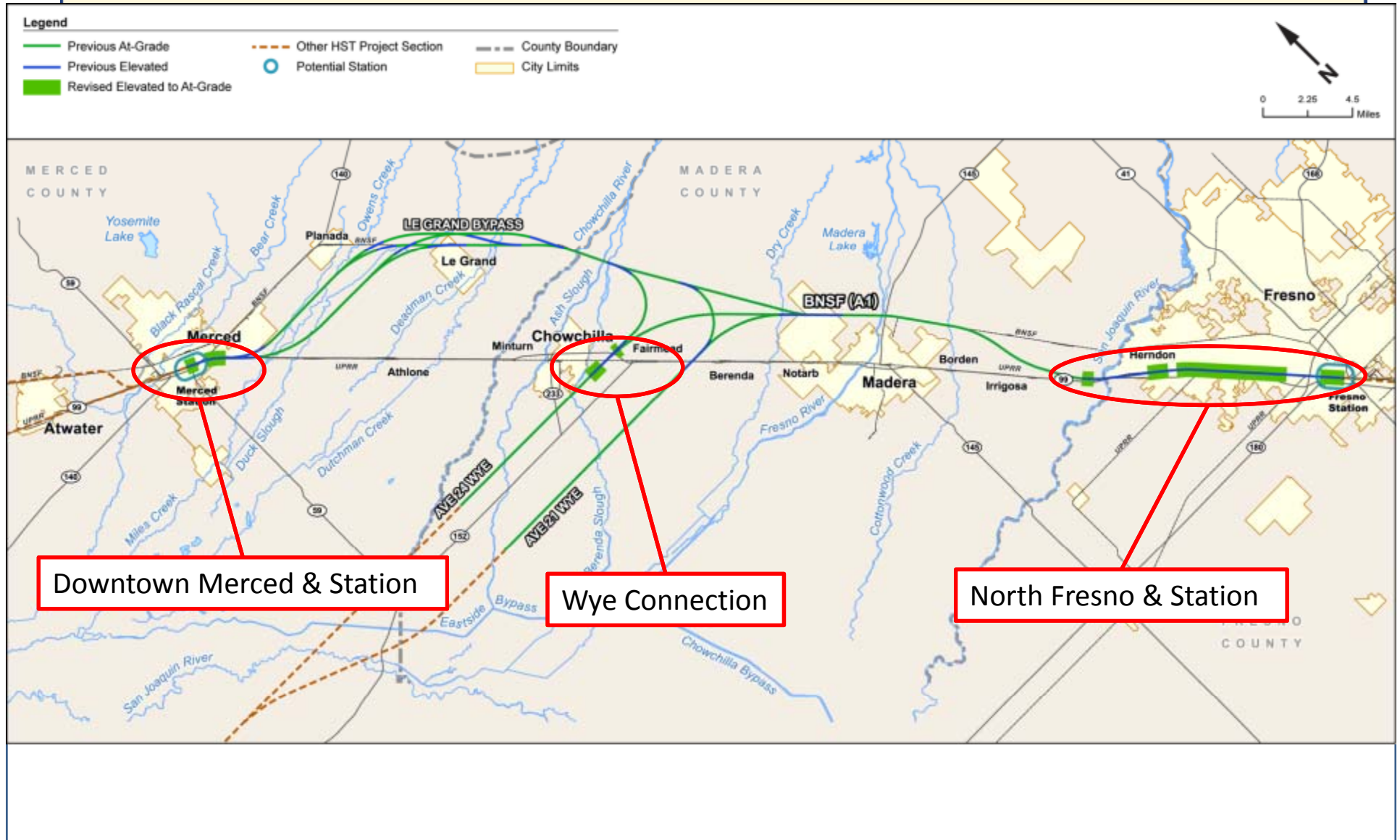
PREVIOUS AT-GRADE & ELEVATED PROFILES



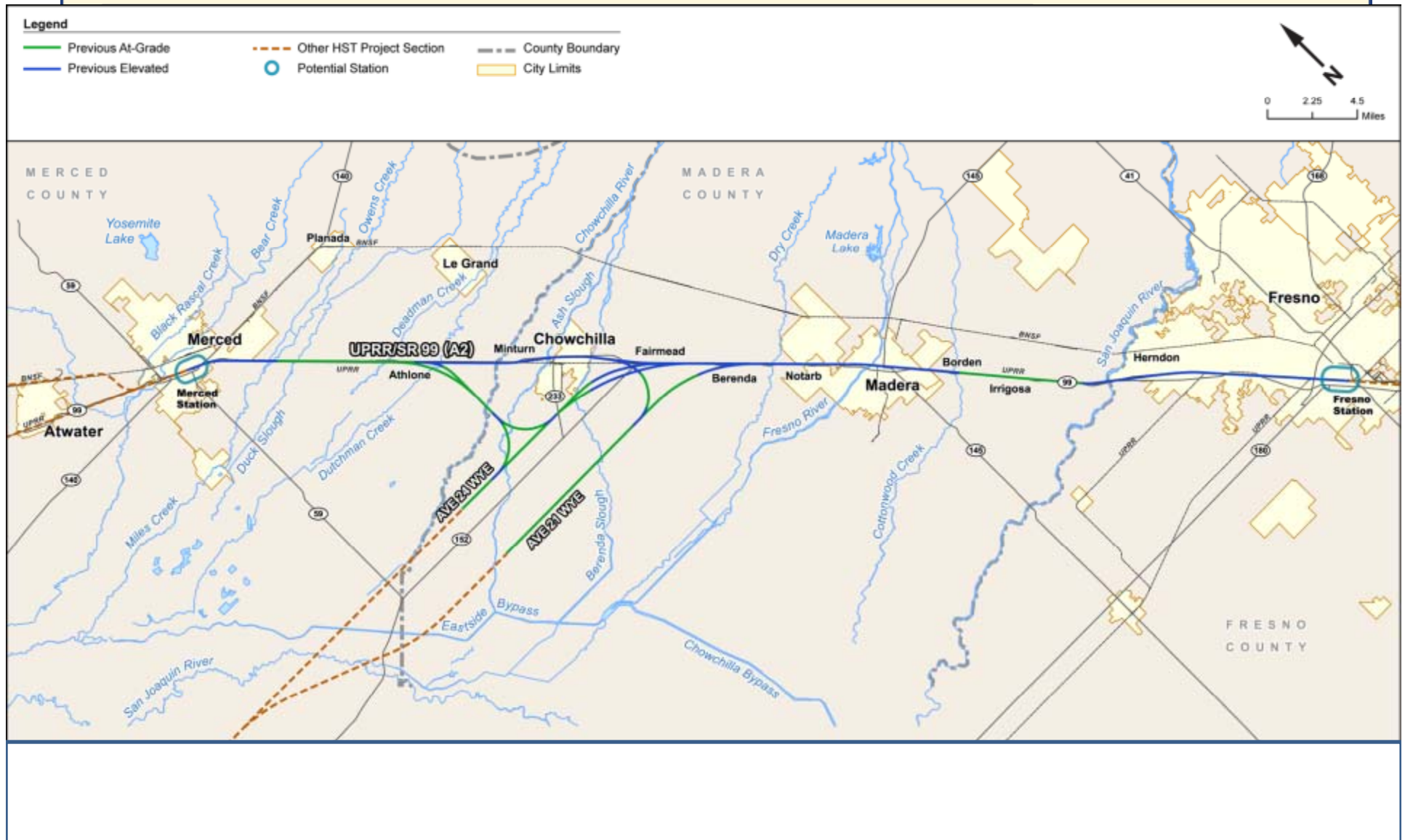
BNSF (A1) ALTERNATIVE



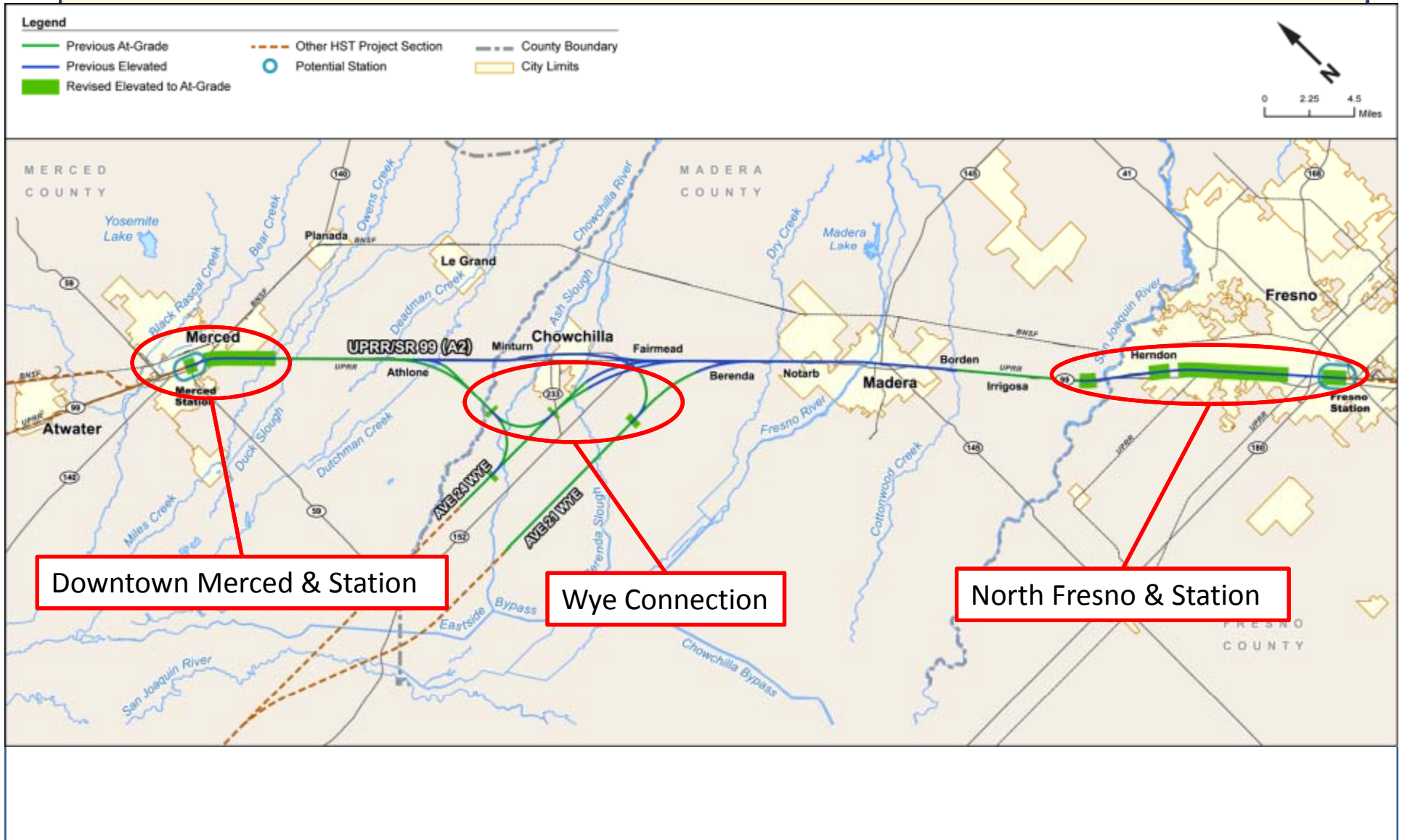
BNSF (A1) ALTERNATIVE ***OPTIMIZED PROFILE***



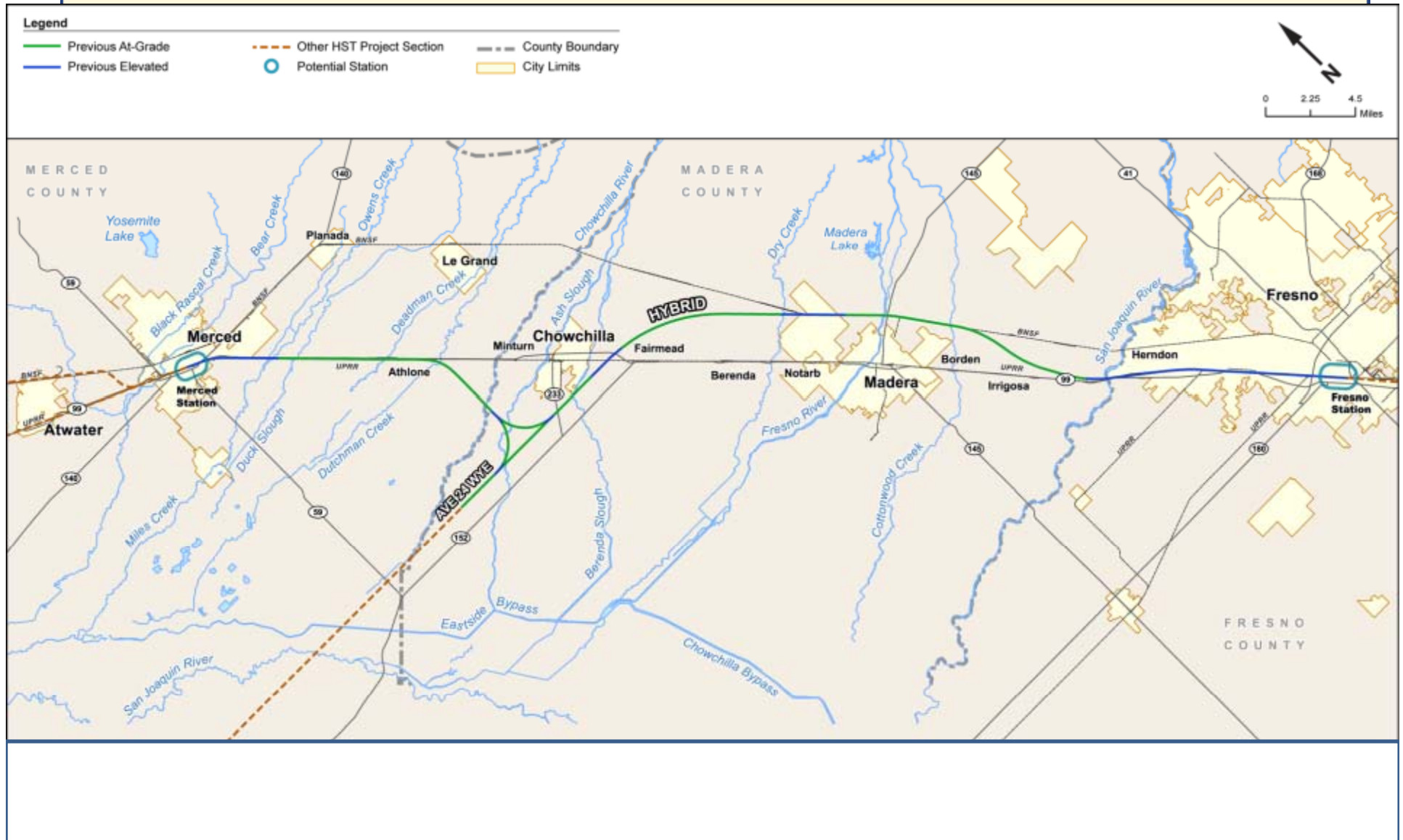
UPRR/SR99 (A2) ALTERNATIVE



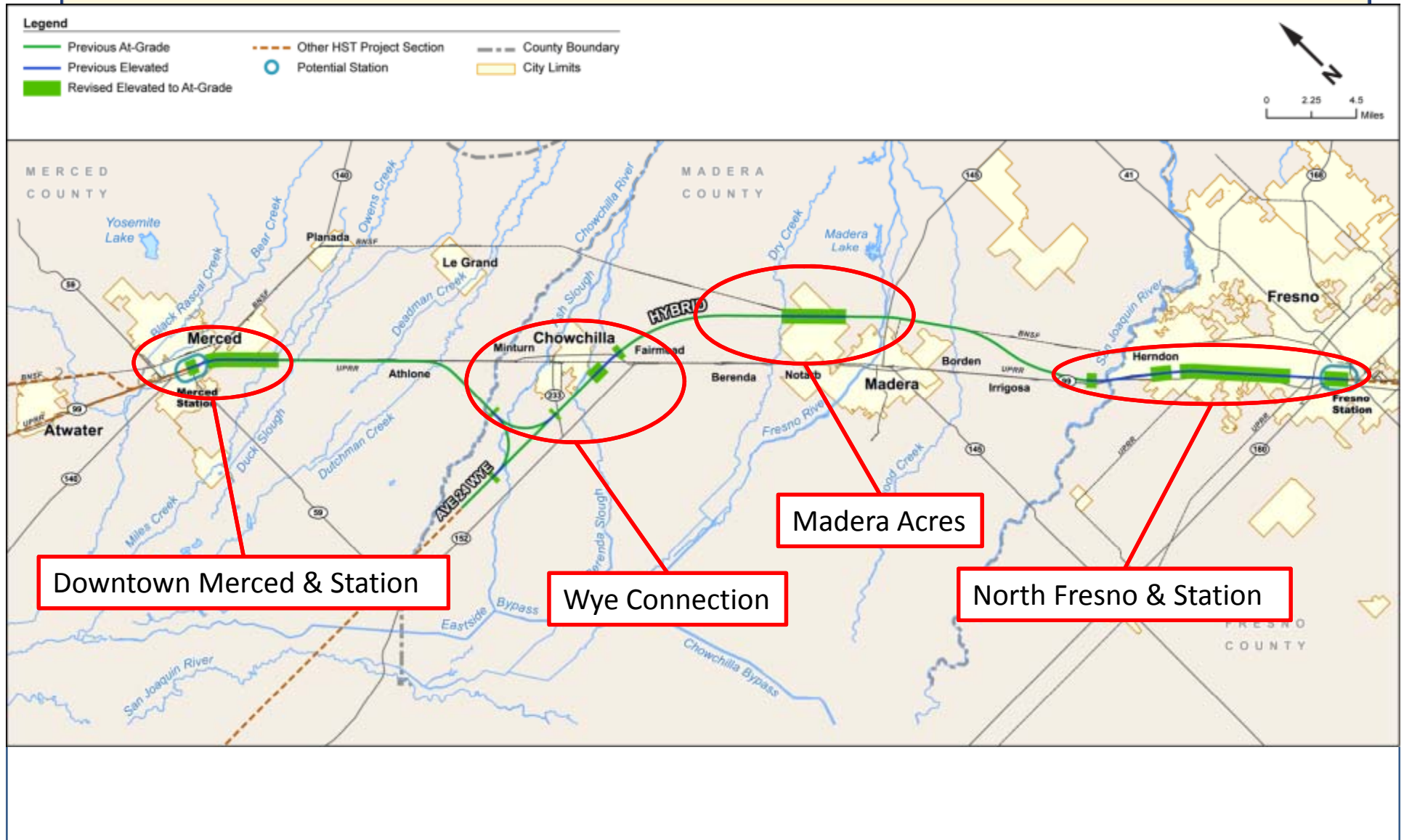
UPRR/SR99 (A2) ALTERNATIVE OPTIMIZED PROFILE



HYBRID ALTERNATIVE



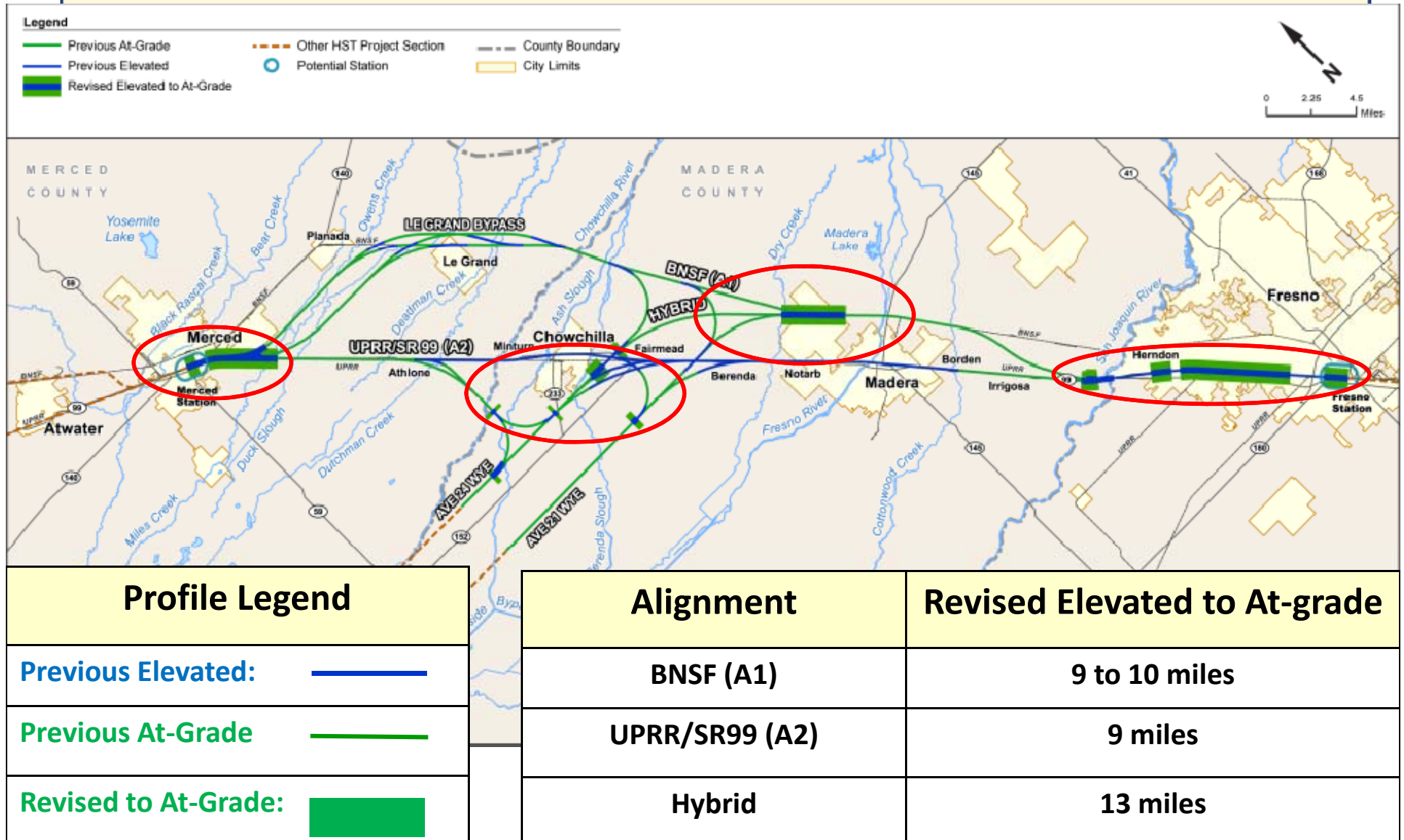
HYBRID ALTERNATIVE OPTIMIZED PROFILE



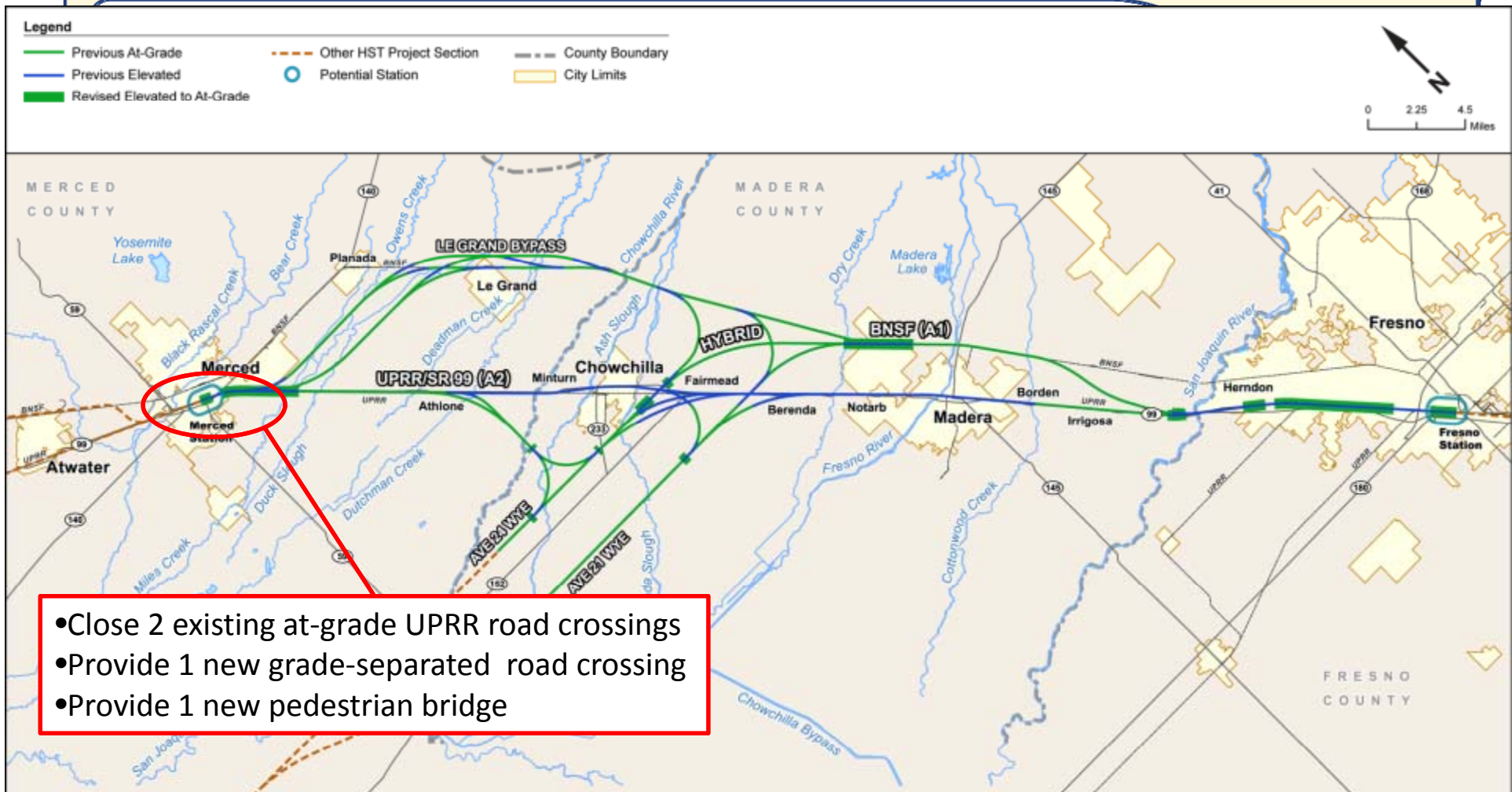
ALL 3 ALTERNATIVES



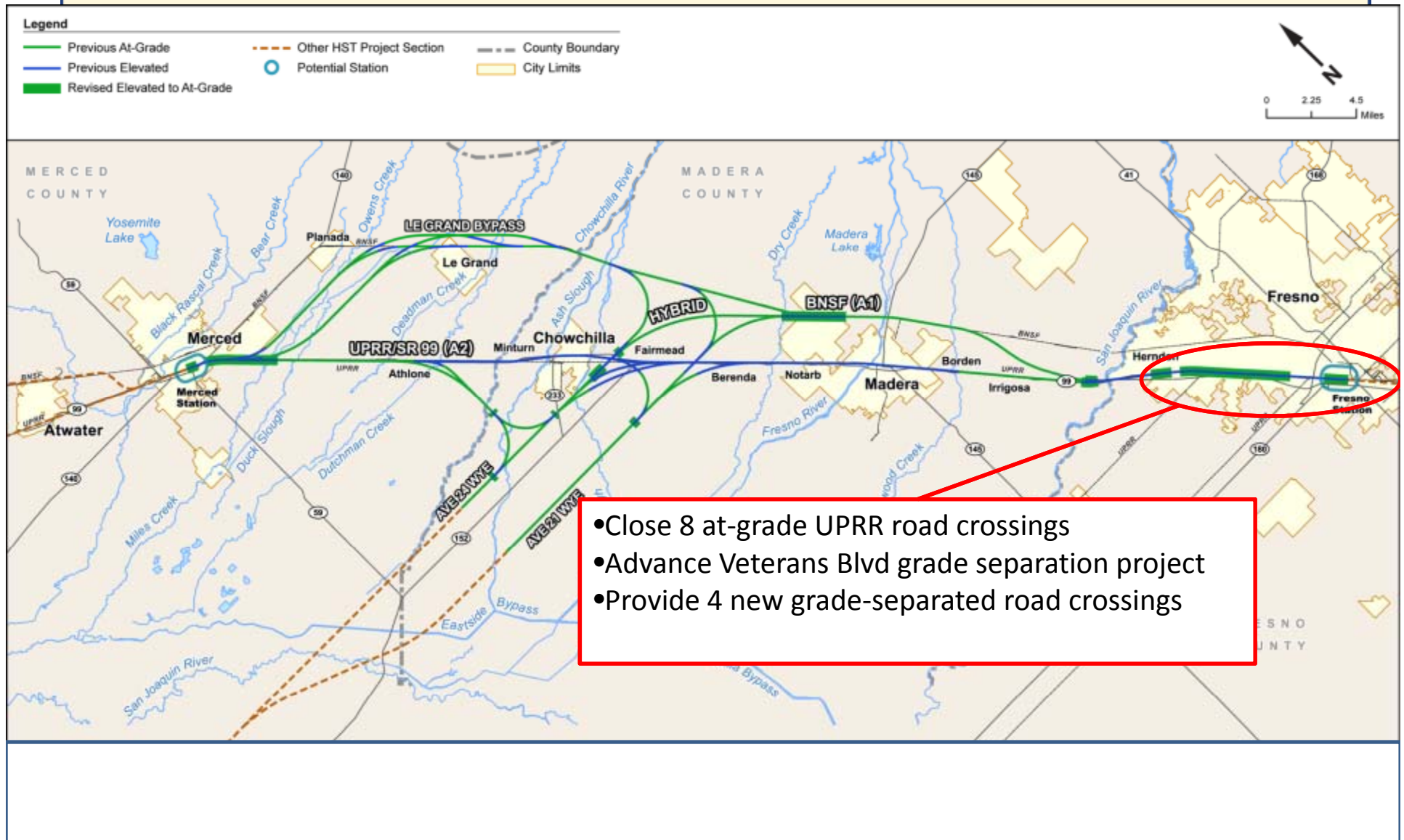
ALL 3 ALTERNATIVES OPTIMIZED PROFILE



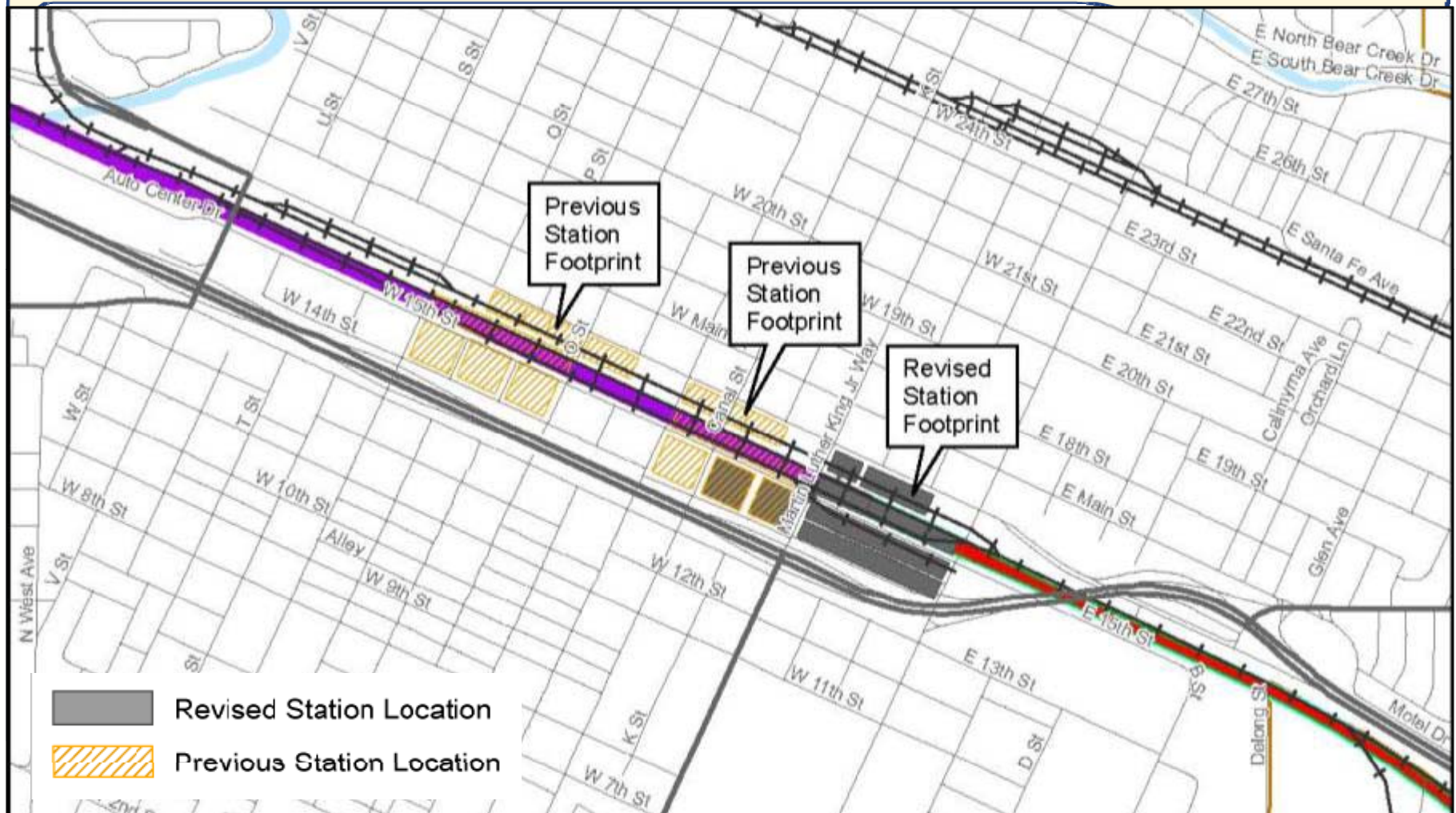
MERCED ROAD MODIFICATIONS & PEDESTRIAN ACCESS



NORTH FRESNO ROAD MODIFICATIONS

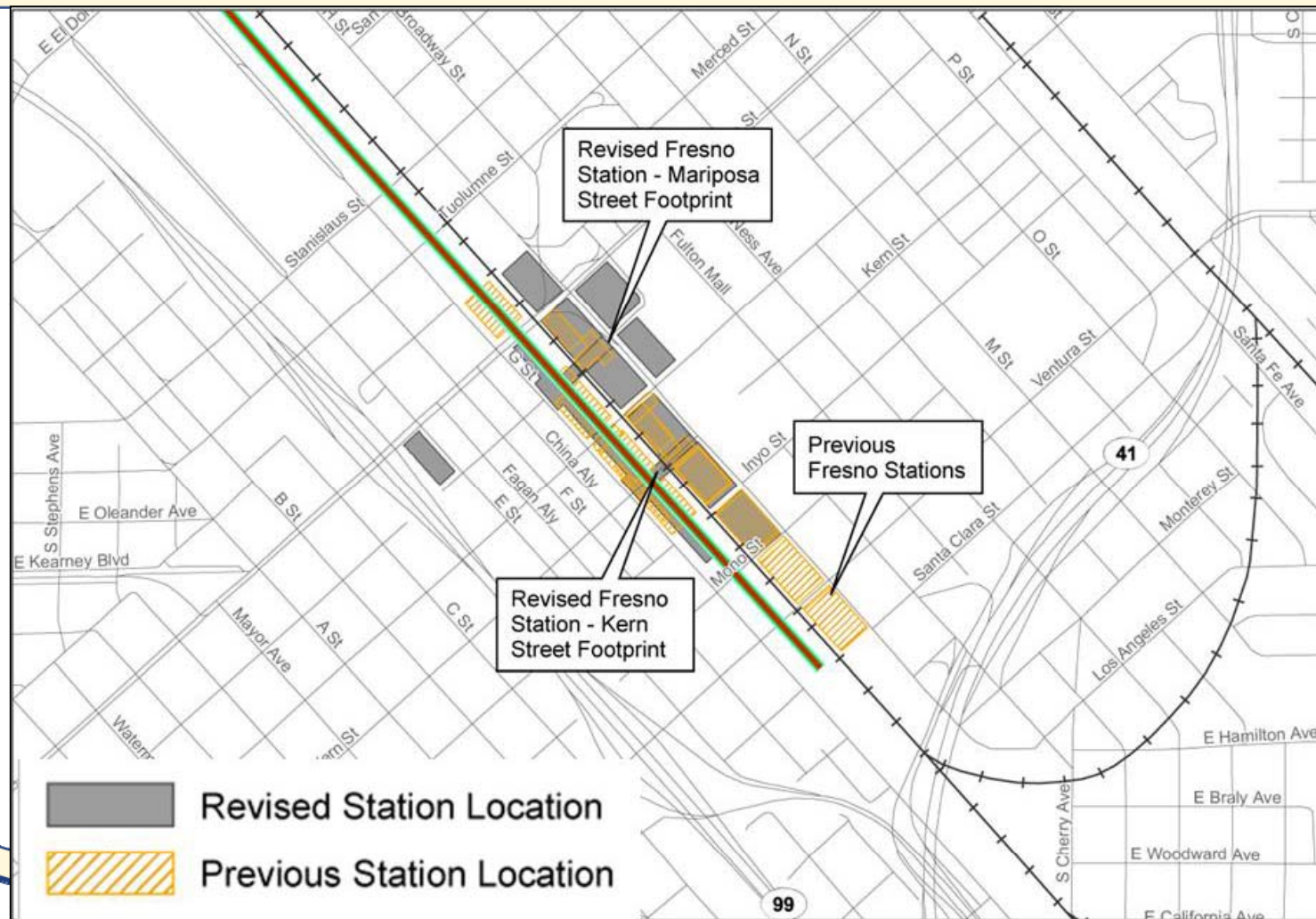


AT-GRADE MERCED STATION REVISED LOCATION (BETWEEN G & MLK)



AT-GRADE FRESNO STATION

REVISED LOCATIONS (2 OPTIONS: G & BROADWAY, G & H)



AGENCY FEEDBACK

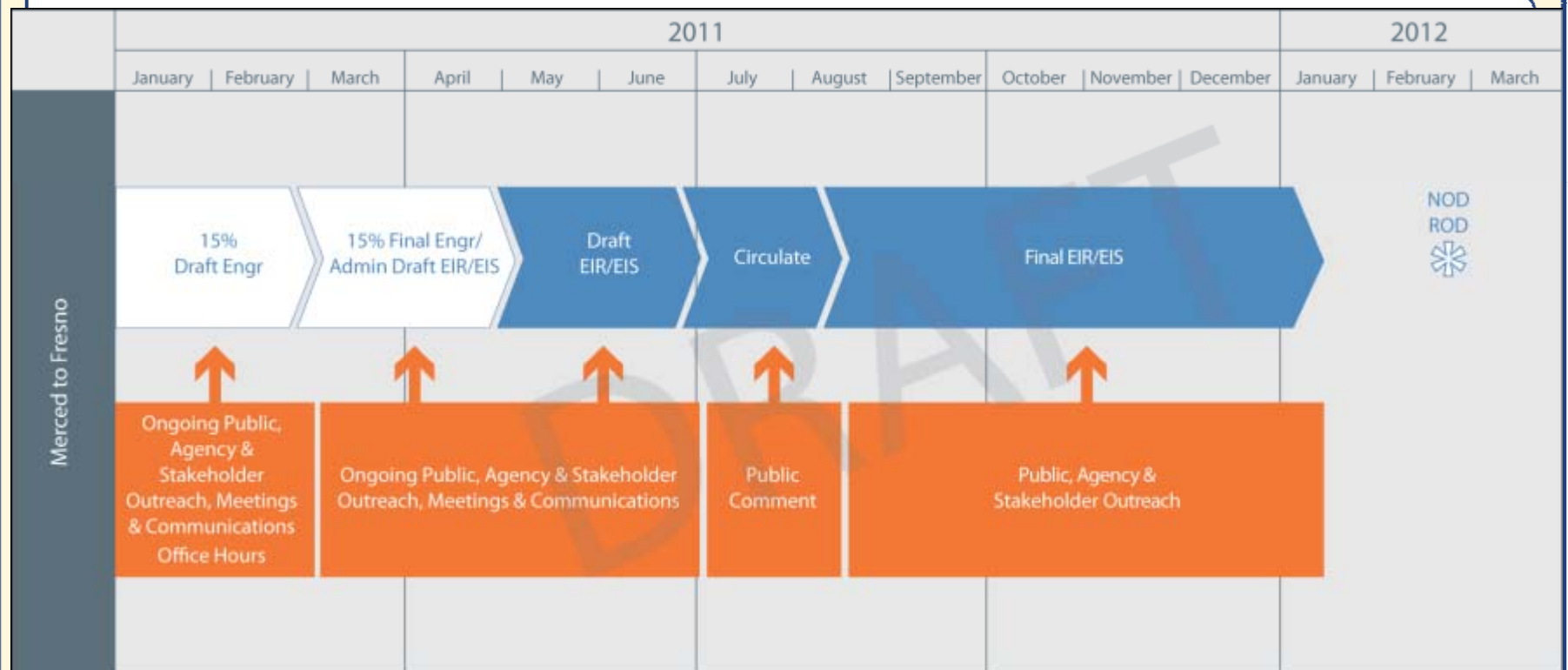
Involved Agencies	Status/Early Feedback
City of Fresno	With included grade separations, City of Fresno is in support
City of Merced	With included grade separation, City of Merced is in support
Caltrans	No change to previous SR99 realignment, continuing coordination
UPRR/BNSF	Continuing coordination

RECOMMENDATIONS

Profile Refinements, Elevated to At-Grade

- Downtown Merced and Fresno Stations
 - ✓ Carry forward at-grade stations
 - x Do Not Carry forward elevated stations
- Elevated Structures to At-Grade
 - ✓ Carry forward profile refinement to reduce elevated structures and increase at-grade segments.

NEXT STEPS



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